



# **NETCORPS 1998 SOUTH AFRICA REPORT**

**IDRC Report/Acacia Initiative**  
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## INTRODUCTION

This report covers my activities as a Netcorps intern for six months (February 21 – August 21, 1998). My internship involved a number of partners, as listed below:

- **Netcorps.** This is a program which was run by an consortium of organisations, and funded by CIDA (Canadian International Development Agency). It involves sending ICT-skilled youth for short internships in partner countries.
- **Schoolnet SA.** The school networking organisation in South Africa, which was the primary partner in South Africa. It is committed to promoting the educational use of ICTs in Education.
- **GSN** (Gauteng Schools Network). A provincial school network, affiliated to Schoolnet SA, to which I was officially seconded.
- **VSO-Canada** (Voluntary Service Overseas). A member of the Netcorps Consortium, which recruited me and administered my overseas placement.
- **IDRC** (International Development Research Centre). The organisation which helped devise Netcorps, facilitated my involvement with Schoolnet SA, and provided financial and other support to me whilst in South Africa.

## ACTIVITIES

### *February 15 to May 15 reporting period*

#### *Investigative tour of North West and Mpumalanga*

The first two weeks on the job saw two one day visits into neighbouring provinces to examine the extent of internet availability. This information would be used to assess the viability of provincial schools Networks in these areas. In general, both areas have some expertise and Internet services but only in urban areas. A detailed report is available at the Schoolnet SA national site: [www.school.za](http://www.school.za) under **reports**, as well on the South African IDRC site: [www.idrc.org.za/connectsa](http://www.idrc.org.za/connectsa).

#### *World Links for Development - WorLD*

This project of the World Bank is partnering with Schoolnet SA to promote and evaluate the use of ICTs in 10 pilot schools. Dell computers have been donated that became available from World Bank offices when they upgraded their workstations. Two hundred and seventy five computers have been allotted for South Africa.

A national training session was held at Pretoria University from April 1 to April 8<sup>th</sup>. Over forty students, teachers, headmasters, and department of Education officials participated. I assisted the training process by working one-on-one with the participants on using e-mail, saving files, searching the Internet, and creating html pages. I also updated the South African World Links web page, [www.world.gp.school.za](http://www.world.gp.school.za), during the course of the week.

A national conference, Africa Telecomm '98, on communication, was held in Johannesburg during the first week of May. The IDRC and the World Bank had arranged a presentation during the conference, involving two local schools, and a live chat session with Uganda WorLD participants. I was responsible for arranging the technical requirements of the event.

NetMeeting was the software used for the South African students to chat with the students in Uganda. Although we were able to make this solution work during a dry run, there were some tense moments during the presentation before we managed to re-connect with Uganda. Overall, this presentation generated high energy and was one of the first development projects to present at a Telecomm conference. See [photographs](#) from the presentation.

### *Gauteng Schools Network – GSN.*

Although my overall work objective was to promote Schoolnet SA, I was positioned at the provincial affiliate in the Gauteng province, and part of my time was devoted to provincial work.

One of my first roles was learning the different aspects of Gauteng Schools Network. Meetings are held on a monthly basis, with my task being largely administrative. GSN has previously been entirely staffed by volunteers, and as the first dedicated resource working for GSN, I was tasked with gathering contact details of board members, taking minutes, and following up with tasks that were assigned to each member. I also managed the GSN Website, [www.gp.school.za](http://www.gp.school.za). Information at this site hadn't been overhauled in almost a year, due to critical staff shortages.

From this work, the minutes are now available at the Website. Also, a database of contact details of board members has been created and is updated regularly. School member information was also gathered. There is now a growing database of detailed contact details of schools using the <gp.school.za> domain with a membership list also available at the Website.

### **Difficulties encountered and how they were resolved. Lessons learned.**

#### *Personal*

Early difficulties could probably be classified as common among internship programs. There was frustration revolving around what role I was expected to fill and how this role would feed off my strengths. The easy lesson to learn was that no job description can compare to the actual work, and most positions have administrative components that are less than enjoyable. The continuing lesson was that I was in a flexible enough position that I needed to create my own role. This freedom was frustrating in the beginning, as I felt I could find a direction for myself, and didn't feel like any direction I was being shown was on target with my goals. This entire process forced me to evaluate the larger picture, and create a direction for myself based on a longer time line. As I look back, it was impossible to create a role immediately without an orientation period followed by some basic ground work.

#### *On the Job*

I came to South Africa with the main goal of applying my skills to the difficulties that arose. Since I didn't have specific goals in this regard, I was unable to say whether I was satisfied or disappointed with the challenges that were present.

Initially, I had to adapt to the different technical environment. A few new software packages I needed to become proficient with included Microsoft Front Page Express, Pegasus Mail, as well as a higher general knowledge of the Linux network operating system.

## **Successes**

### *WorLD Partnership*

The close working relationship with the World Bank Project, World Links for Development that began in a concrete way in March 1998 has helped increase SchoolNet SA's visibility as an important organisation. It is an example for possible sponsors of projects that SchoolNet SA is in the business to facilitate, as well as being a springboard for networking with others interested in the development work SchoolNet is involved.

### *Gauteng Schools Network - GSN*

With GSN being my host organisation, it has also been the area with which I have become most acquainted. With the positional movement of Denis Brandjes to acting director of SchoolNet SA, I had to take over management of GSN. I saw this management role as a behind the scenes administration position. Approaching my role in this fashion allowed the public perception of GSN to remain constant once I leave. The transfer of responsibility has been a motivating factor to see action happening, as well as a chance to apply my personal management skills.

### *May 15 to August 15 reporting period*

## **Activities**

### *Computer Exhibition*

The "1998 International Computer Faire" was held in Midrand during the last week of May. SchoolNet SA, GSN and Netday SA were donated a stand by the operators of the faire. I was left with the responsibility of organising the stand and preparing updated brochures. I contacted Corel and arranged the donation of three software products - Corel Draw 8, and two copies of Word Perfect Suite. In exchange for this, their logo was included on our new brochure. Raffle tickets were sold for these prizes with R675 being raised for GSN

Since there was no budget available for the stand, I relied on the resources of the IDRC, Netday, and Corel to make photocopies. We passed on more than 1000 brochures and could have passed out thousands more if they were available. Although most of my week was spent at our booth, it was well worth the time away from the office establishing the brand name of the SchoolNet SA.

### *Office Move*

Preliminary three month funding for SchoolNet SA came from the IDRC in May. This included moving into their office space. On June 10th we packed up from a residential office, and moved into their Braamfontein Centre offices. This move made a large difference in the work that could be accomplished. Phone, fax and Internet services were available to run the office in a much more efficient manner. This represented the first time that volunteers weren't carrying the cost of running SchoolNet SA and GSN.

### *Northwest Training*

The World Links project funding in part by the World Bank involved the training of students, and teachers on the educational uses of the Internet.

Due to high workload in the GSN office the Northwest training, held in June 1998, responsibilities were delegated to SchoolNet SA staff. Regardless, it can be reported that this training was successful.

### *CIDA Award*

The proposal written in April 1998 for the CIDA Award grant was not accepted. It had been my purpose, under this grant, to remain working in South Africa with SchoolNet SA for an additional four months. The two areas that did not meet the award requirements were lack of detailed methodology and the fact that we already were receiving IDRC funding.

### *Gauteng Schools Network*

Available information has turned out to be the theme of putting GSN in a stronger administrative position. Member and future member school contact details had been collected over the last six months. A database was developed to make this information flexible and manageable. Data collected included: school name, head person, location, address, phone & fax number, email address, web address, and contact person. This information was collected and verified by using information that was available. This included sending e-mail, phoning, and mailing forms requesting the above mentioned information. Also added to the database was an indication of whether the school paid their membership fees. To date there are 74 schools listed on this database. Already, the benefits of being able to contact the schools is paying off, as this enabled invoices to be sent to the 46 member schools. The address information from the database was used to generate envelopes and invoices. It is estimated that GSN requires a membership of 80 to 100 schools to become self sufficient.

Eight member schools use leased line connections for Internet access. Billing from the service provider comes through a single account which is in the name of GSN. In order to clear up some confusion over the division of the invoice to each of the eight schools, a Microsoft Excel spread sheet was created. Internet costs from January 1997 until the present were inputted onto the sheets so everybody can quickly access this information. The spread sheet now helps automate the process of invoicing the leased line schools - which is done every business quarter. By electronically organising these accounts, I ensured that invoices from the Internet Service Provider that were more than 120 days old were cleared!

The administration of several e-mail lists was taken over by myself. The GSN list, [gsn@gp.school.za](mailto:gsn@gp.school.za), was updated to include all members of GSN. This list has now grown to about 150 subscribers. List management also includes removing e-mail address that are no longer active, requesting the creation of new lists, and ensuring the list server is working.

The [GSN Website](#) has continued to grow and is a reflection of the increased organisation. School members subsequently showed their support for having a strong central web page by making comments for changes and corrections. After no changes for many months, the site is receiving an estimated five hundred hits per month.

### *Call for Participation Meeting*

One of the final official functions was the organisation of a call for participation meeting. This meeting was intended to address the method to carry GSN forward and reach agreement on electing the new executive and adopting the constitution.

A database of schools was used to prepare 248 posted invitations. Money raised from the Computer Faire was used to pay for the postage. In addition, this same open invitation was e-mailed to over one hundred addresses. The meeting on August 6th was attended by 25 people included members of the Gauteng Department of Education and the IDRC.

The meeting was successful in adopting the new constitution and electing a new eight-member executive board. I also gave an administrative update announcing there are 45 member schools and that the finances were on track to be balanced this August.

### *Transfer of Knowledge*

A key component of the internship was the transfer of knowledge to local people. In this effort the leased-line/Excel spread sheet was one of the most complex and important pieces of information that needed to be explained. Frank Tlamama, a local intern, was schooled on the formulas on the Excel chart and how this fits into the invoicing process. A one page summary was prepared explaining these steps.

The schools database represents the real people who make up GSN. Ensuring that this database continues to be used, updated, and managed was also part of the knowledge transfer.

The customised options of services GSN offers were also explained to Frank. This explaining included leased line accounts, dial-up accounts, Web pages and e-mail, and the prices associated with these services.

### **Difficulties encountered and how they were resolved. Lessons learned.**

#### *Transportation*

Working in a large metropolitan area like Johannesburg means the need to meet people all over the city. Transportation was a limiting factor even after we purchased a vehicle, as it was stolen! The use of public transportation ended up in my being stranded by a broken down bus and walking home. Forward planning was required to find someone available to transport me to and from meetings. This experience is also a good example of how electronic communication can reduce the need to travel, as in most cases collaborative work can be done from separate locations.

#### *Banking*

Running the financial side of an organisation but not having any access to daily banking information meant some delays on accurately determine the financial position. This information was needed, as some schools use direct payment. It was thought Internet banking would make this information more accessible. It took longer than expected to sign up for Internet access because the GSN bank account required two of the three signature authorities to authorise this

process. In the end, bank statements were faxed when required. This meant information was dated by one to two weeks.

### *Accurate information*

The technology being used to provide multiple e-mail accounts in each school is a customised solution unique to Schoolnet SA. It took formal and informal discussion to discover all the needed components to grasp the larger picture of how the Unix to Unix Communications Program (UUCP) was being implemented in combination with Pegasus Mail, under a locally developed software package. The most enlightening information came from Keven Naphtali, the other Netcorps intern who was using this technology in Soweto. Since he was actually working to implement UUCP, he had a fuller grasp of the various components. See [details](#) of this service.

With this more complete information, schools were given a much more concise and accurate explanation of how multiple e-mail accounts could be implemented in their school.

## **Successes**

### *Computer Exhibition*

The Computer Faire was a hectic week but extremely successful for GSN. I was able to find transportation each day to the fair as well as source people to photocopy flyers. A presence at the exhibition definitely added to the SchoolNet SA name with many people seeing the organisation for the first time, or being reminded that we are still going strong in South Africa. I definitely recommended a presence at this event next year.

### *Database*

The database of school contact details has and will continue to allow GSN to manage the office and be able to disseminate information in an efficient manor. It is a slow process to piece together school details using e-mail footers, phone books, direct assistance, school contacts, and web pages but this information is necessary for GSN to grow.

### *Lease Line (Diginet) Spread Sheet*

Leased line Internet access in South Africa is offered to the schools by Uninet (the university network) at a subsidised rate which charges mainly traffic (megabyte) usage. There are eight member schools of GSN which use digital leased lines (locally known as Diginet lines) to access the internet. Better recording of these schools' traffic costs was needed. For this reason, an Excel spread sheet was created.

The Diginet spread sheet representing megabyte usage of member schools has been an invaluable resource. Once schools received their June invoices, many questions and queries were received at the office. Nothing could satisfy these queries more than giving schools their total usage figures all the way back to January 1997! There were no queries or problems once schools were provided this information.

## *Website*

The updated Website has given GSN an image better representative of where GSN is today. The future plans for the site will involve documenting the membership process online, so schools that already use the Internet can join the network of other online learners and educators.

The list of educational links on the Website has also grown greatly. By weeding through mail received from the mailing list, various educational sites are quickly examined for content then added to the [www.gp.school.za/links](http://www.gp.school.za/links) page. This page, as a launch site for schools to join in on education projects, now offers one of the most extensive list of educational links in South Africa.

## *Management Skills and Technology*

Personally, I have gained excellent business skills experience as well as improved my organisational ability. I now have tangible experience of how educational theory needs to be mixed with a tenacity to complete a task.

These management tasks have also required a sound understanding of the technology being used in this area of the world. I now have more practical experience administrating web pages, mailing lists, and Internet queries. I have also been given an introduction to the Linux brand of Unix and the Unix to Unix Communications Program (UUCP). I now have the basis to use Internet technologies that don't require expensive off the shelf software such as Window NT.

## *International Relationships*

One of the obvious benefits of working overseas is the international connections that are established. In this case with SchoolNet SA, these relationships are being forged (assisted by the IDRC) at the highest levels of government, as shown by the [Memorandum of Understanding](#) that was signed in May 1998 between Canada and South Africa. For me, they also extended down to the personal level of my daily interactions with my colleagues in Johannesburg. I participated in the strengthening of relationships with the World Bank, VSO, IDRC, SchoolNet Canada, and Industry Canada. These benefits will be realised beyond my stay with SchoolNet SA and be the seeds of further collaboration in the future.

## **Conclusion**

Gauteng School Network and I grew together over the last sixth months. The organisation, as well as myself, is better prepared for the necessary growth that will allow it to be sustainable. There are large questions that time will answer in the weeks and months after my departure. Since much of the organisation and myself were one and the same, a splitting of a relationship is required so that both can exist on their own. I know for myself, that I am more confident with the new experience I have gained and am more ready for what lies ahead. I am also confident in the people that I have worked with in the name of GSN and know the organisation is also ready to grow.



